

# **GENETIC DIVERSITY AND AUTHENTICATION OF *Panax vietnamsensis* Ha et Grushv. USING RAPD MARKERS**

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## **Summary**

In the present study, genetic diversity of 30 isolates including *Panax vietnamsensis*, *Panax stipuleanatus* and *Panax bipinnatifidus* collected in Quang Nam, Kon Tum, Lao Cai, Vinh Phuc. Total 134 bands produced using 9 primers. The rate of polymorphic bands was 97.01%. The coefficient of genetic similarity between 10 isolates of *Panax vietnamsensis* ranged from 0.70 to 0.95; between 10 isolates of *Panax bipinnatifidus* was 0.44-0.87 and between 10 isolates of *Panax stipuleanatus* was 0.44-0.90. The coefficient of genetic similarity between 30 isolates of 3 species ranged from 0.11 to 0.95. Five RAPD markers were produced from three primers could be used for rapid authentication of *Panax vietnamsensis* from *Panax bipinnatifidus* and *Panax stipuleanatus*, such as OPA14 (0.55 kb, 1.0 kb and 1.4 kb), OPC16 (0.3 kb), OPC18 (0.15 kb and 0.4 kb).

Keywords: *Authentication, Genetic diversity, Panax vietnamsensis, Genetic similarity, RAPD.*